Recent Trans-Frontier Explorations, communicated by Col. J. T. Walker, C. B., R. E., Surveyor-General of India.

(With a Map.)

During the year 1876, the Mullá, one of the explorers attached to the Great Trigonometrical Survey, made a survey up the course of the Indus from the point where it enters the plains above Atak, to the point where it is joined by the river of Gilghit. All other portions of the course of the Indus—from the table-lands of Tibet, where it takes its rise, down to its junction with the ocean—have long since been surveyed; but up to the present time this portion has remained unexplored, and has been shown on our maps by a dotted line, the usual symbol for geographical vagueness and uncertainty. Here the great river traverses a distance of some 220 miles, descending from a height of about 5,000 feet to that of 1,200 feet above the level of the sea. Its way winds tortuously through great mountain ranges, whose peaks are rarely less than 15,000 feet in height and culminate in the Nanga-Parbat, the well-known mountain whose height, 26,620 feet, is only exceeded by a very few of the great peaks of the Himálayas. The river in many places is hemmed in so closely by these great ranges, that its valley is but a deep-cut, narrow gorge, and, as a rule, there is more of open space and culturable land in the lateral valleys, nestling between the spurs of the surrounding ranges, than in the principal valley itself.

The positions and heights of all the most commanding peaks in this region had been long fixed by Captain Carter's observations at trigonometrical stations on the British Frontier line; but no European has ever yet penetrated into it.* Very difficult of access from all quarters, it is inhabited by a number of hill tribes, each independent and suspicious of the other, who are in a great measure separated and protected from each other by natural barriers and fastnesses. As a whole, the region has never been brought into subjection by any of the surrounding powers. Each community elects its own ruler, and has little intercourse with its neighbours; and with the outer world it only communicates through the medium of a few individuals who have the privilege of travelling over the country as traders. The Mullá possesses this privilege, and thus in the double capacity of trader and explorer, he traversed along the Indus, and through some of the lateral valleys, leaving the others for exploration hereafter.

^{*} Several itineraries which were obtained from native information are published in Dr. Leitner's Dardistán, and they have been combined together, with considerable ingenuity and very tolerable success, by Mr. Ravenstein, in a map published in the Geographical Magazine for August, 1875.

This work done, he proceeded, in accordance with his instructions, to Yásín, marching through the Gilghit Valley, but not surveying it, because the labours of the lamented Hayward, who was murdered at Yásín, already furnished us with a good map of that region. From Yásín he surveyed the southern route to Mastuj through the Ghizar and Sar Laspur Valleys; this has furnished an important rectification of a route which had hitherto been laid down from conjecture only, and very erroneously; for the road, instead of proceeding in a tolerably straight direction from Yásín to Mastuj, as was supposed, turns suddenly from south-west to north-north-east at Sar Laspur, which is situated at some distance to the south of the direct line, in a valley lying parallel to the valley of Chitral. At Mastuj the Mullá struck on to his survey of the route from Jalálábád, viá Dir and Chitrál, to Sarḥadd-i-Wakhán, in 1873, and then proceeded along that route towards the Baroghil Pass, as far as the junction of the Gazan with the Yarkun River, and then along the northern road from Mastuj to Yásín. road turns up the Gazan Valley, crosses the Tui ar Moshabar Pass—which is conjectured to be probably not less than 16,000 feet in height—and, after traversing a deep crevassed glacier for a distance of about eight miles, reaches the point where the Tui River issues in great volume from the glacier; the road then follows the course of the river down to its junction with the Warchagam River, a few miles above Yásín.

Returning to Sar Laspur, the Mullá next surveyed the route to the south-west, up the valley leading to the Tal Pass. This pass is situated on a plateau of the range which connects the mountains on the western boundary of the valley of the Indus with those on the eastern boundary of the valley of Chitrál, and is generally known by the people of the country as the Kohistán. The sources and most of the principal affluents of the Swát and the Panjkorá rivers take their rise in this region, all the most commanding peaks of which were fixed by Captain Carter's triangulation; but of the general lie of the valleys relatively to the peaks, nothing at all definite has been known hitherto. The Mullá has done much to elucidate the geography of this region. On crossing the Tal plateau he descended into the Panjkorá Valley, and traversed its entire length down to Dodbah, at the junction of the Dir river with the Panjkorá, where he again struck on his route survey of 1873.

It would have been well if he could then have gone done the Panjkorá to its junction with the Swát River, but circumstances prevented him from doing so. He therefore travelled along the Havildar's route of 1868 as far as Miánkálai, and then surveyed the road to Nawágai and on to Pashat in the valley of Kunar; and finally, returning to Nawágái, he surveyed the road from there down to the British fort of Abazai.

Thus the explorations of the Mullá have added much to our know-ledge of the geography of the interesting regions lying beyond our northern Trans-Indus Frontier. A good deal, however, still remains to be done before our knowledge of these regions is as full and complete as it should be, and every effort will be made to carry out further explorations as soon as possible.

The accompanying sketch map has been constructed to illustrate the Mullá's operations; it also shows the localities where more information is wanted. In the north-east corner the results of a recent reconnaissance of portions of the Karambar and the Nagar Valleys by Captain Biddulph are given, but somewhat modified from his map of the country.

Notes on two ancient copper-plate Inscriptions found in the Hamírpúr District, N. W. P.—By V. A. Smith, B.A., B.C.S. With a Note by Pránnáth Panpit, M.A., B.L.

In 1872, a peasant when ploughing in the lands of Mauza Nanyaurá, Parganah Panwárí, Zila Hamírpúr, turned up two inscribed copper-plates. The plates were brought to Mr. W. Martin, C. S., who is now on furlough, and were left by him in the hands of a local paṇḍit (Muralidhar) who was in his service. With the assistance of this man, I have had Nágarí transscripts prepared, and have made translations of the inscriptions.

Plate No. I is 15 inches long by 11 inches broad, and is covered with an inscription of 19 lines, very well engraved and in good order. This record is interesting as throwing light on the chronology and order of succession of the Chandel kings. It tells us that Vidyádhara Deva was succeeded by Vijaya Pála Deva, and that the latter was succeeded by Deva Varmma Deva, lord of Kálinjar, who in 1107, Samvat, bestowed the lands to which the record relates. The statement that Vijaya Pála Deva succeeded Vidyádhara Deva is in accordance with the testimony of the Chhattarpur Mhau inscription, but that document gives Kírttí Varmma as the name of Vijaya Pála's son and successor, whereas my copper-plate instead of Kírttí Varmma names Deva Varmma Deva. Both inscriptions apparently refer to the same prince.

General Cunningham conjecturally assigns 1122 Samvat (1065 A. D.) as the date of the conclusion of Vijaya Pála's reign and the accession of Kírttí Varmma. Whatever was the name of Vijaya Pála's successor, it is clear from this copper-plate inscription that he had begun his reign previous to 1107, Samvat (1050 A. D.).